



33C-2-13-92

#249-92  
Prior Art

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re App : Michael R. Forman  
S.N. : 07/800,201  
Filed : November 29, 1991  
For : LASER BONDING OF ANGIOPLASTY BALLOON CATHETERS

January 28, 1992  
Art Unit 3308  
Docket No. 910022.ORI

INFORMATION DISCLOSURE STATEMENT

The Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

In recognition of the obligations imposed upon applicants and their attorneys and assigns under 37 CFR 1.56, the accompanying list identifies prior art related to the invention described in the above-captioned application. In support of the accompanying list, the following discussion is submitted.

U.S. Patent No. 4,069,080 (Osborne) discloses an apparatus and method for forming a linear weld, to bond superposed sheets of polymeric material. A laser beam is expanded by a lens, directed through a converging lens and then to a cylindrical lens. Beyond the cylindrical lens, the beam forms a line when focused. This allows forming linear thermoplastic welds without moving the laser source, the optics, or the material being welded.

U.S. Patent No. 4,251,305 (Becker et al) shows a non-contact method for heat sealing a balloon onto a catheter. A length of thin tubing is slid over an elongated shaft of the catheter. Shrink tubing is installed over the thin wall tubing at its ends, overlapping the shaft, and partially shrunk. Then, lamps provide

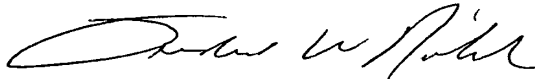
further radiant energy to form gradually tapering thermoplastic joints that bond the tubing to the shaft.

U.S. Patent No. 4,941,877 (Montano, Jr.) is directed to a balloon catheter in which the balloon has fluted ends. When collapsed, the balloon transition zones collapse in a substantially star-shaped cross section rather than a flat-collapsed configuration.

A copy of each of the listed references is enclosed.

Respectfully submitted,

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Enclosures

**CERTIFICATE OF MAILING**

I hereby certify that the foregoing Information Disclosure Statement in application Serial No. 07/800,201 of Michael R. Forman, filed November 29, 1991, for "LASER BONDING OF ANGIOPLASTY BALLOON CATHETERS" is being deposited with the United States Postal Service as First Class mail, postage prepaid, in an envelope addressed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231 on January 28, 1992.

  
Frederick W. Niebuhr